

From  
Dudge N<sup>o</sup> 3419 April 11<sup>th</sup> 1891  
<sup>to</sup>  
Dudge N<sup>o</sup> 3467 Aug 28<sup>th</sup> 1891  
From  
Hydro N<sup>o</sup> 2632 Apr 12<sup>th</sup> 1891  
<sup>to</sup>  
Hydro N<sup>o</sup> 2646 Aug 29<sup>th</sup> 1891

Sayag Rock  
1891

| Hours | Min. | Hours | Min. | Hours | Min. |
|-------|------|-------|------|-------|------|
| 0     | 0    | 1450  | 21   | 2900  | 83   |
| 50    | 0    | 1500  | 03   | 29016 | 88   |
| 100   | 0    | 1550  | 24   |       |      |
| 150   | 0    | 1600  | 36   |       |      |
| 200   | 1    | 1650  | 27   |       |      |
| 250   | 1    | 1700  | 29   |       |      |
| 300   | 1    | 1750  | 31   |       |      |
| 350   | 1    | 1800  | 33   |       |      |
| 400   | 2    | 1850  | 35   |       |      |
| 450   | 2    | 1900  | 37   |       |      |
| 500   | 3    | 1950  | 38   |       |      |
| 550   | 3    | 2000  | 41   |       |      |
| 600   | 4    | 2050  | 43   |       |      |
| 650   | 4    | 2100  | 45   |       |      |
| 700   | 5    | 2150  | 47   |       |      |
| 750   | 5    | 2200  | 49   |       |      |
| 800   | 6    | 2250  | 51   |       |      |
| 850   | 7    | 2300  | 53   |       |      |
| 900   | 8    | 2350  | 56   |       |      |
| 950   | 9    | 2400  | 58   |       |      |
| 1000  | 10   | 2450  | 61   |       |      |
| 1050  | 11   | 2500  | 64   |       |      |
| 1100  | 12   | 2550  | 66   |       |      |
| 1150  | 14   | 2600  | 68   |       |      |
| 1200  | 15   | 2650  | 71   |       |      |
| 1250  | 16   | 2700  | 74   |       |      |
| 1300  | 18   | 2750  | 76   |       |      |
| 1350  | 19   | 2800  | 79   |       |      |
| 1400  | 20   | 2850  | 83   |       |      |

1891.

~~En~~

1891

P. O. M.

1891

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 3419 D. Date April 11<sup>th</sup> 1891.

Siglbee Machine. Reel. Very.

Turns 733 Cor. + 39 Depth 772 fms.

Shot or lead 38 lbs.

Bottom gn. M. 64. Ap.

Bottom temperature 39.0 -

No. of thermometer 66 735 Cor. -

Corrected temperature 39.0 -

Air 82° Surface 81° Drift 1.0 W. N. S.

Trawl or dredge Small Beam & Swabs.

| SOUNDING WIRE. |           | TURNS. | DREDGE ROPE. |           |
|----------------|-----------|--------|--------------|-----------|
| DOWN.          | UP.       |        | DOWN.        | UP.       |
| 5. 39. 30      | 54. 15    | 0      | 5. 59. 00    | 25. 30    |
| 40. 25         | 53. 30    | 100    | 6. 03. 45    | 20. 10    |
| 41. 20         | 52. 15    | 200    | 7. 30        | 16. 05    |
| 42. 20         | 52. 00    | 300    | 11. 00       | 9. 01. 15 |
| 43. 15         | 51. 15    | 400    | 15. 00       | 56. 45    |
| 44. 15         | 50. 30    | 500    | 18. 30       | 51. 00    |
| 45. 20         | 50. 00    | 600    | 22. 15       | 45. 50    |
| 46. 25         | 48. 30    | 700    | 26. 15       | 40. 00    |
| 46. 50         | 5. 48. 00 | 800    | 30. 15       | 33. 25    |
|                |           | 900    | 34. 15       | 27. 00    |
|                |           | 1000   | 38. 30       | 80. 45    |
|                | 41. 00    | 1050   | 41. 00       | 59. 00    |
|                | 49. 00    | 1100   | 50. 00       |           |
|                | 52. 30    | 1200   | 56. 30       | 53. 45    |
|                | 7. 21. 00 | 1300   | 7. 25. 00    | 7. 46. 00 |
|                |           | 1400   |              |           |
|                |           | 1500   |              |           |
|                |           | 1600   |              |           |
|                |           | 1700   |              |           |
|                |           | 1800   |              |           |
|                |           | 1900   |              |           |
|                |           | 2000   |              |           |
|                |           | 2100   |              |           |
|                |           | 2200   |              |           |
|                |           | 2300   |              |           |
|                |           | 2400   |              |           |

Prof. surface bottom over at 9. 57  
in at 10. 07

|      |     |      |
|------|-----|------|
| 2946 | 88  | 2500 |
| 733  | 49  | 2600 |
| 2210 | 39  | 2700 |
|      | 733 | 2800 |
|      | 772 | 2900 |
|      |     | 3000 |
|      |     | 3100 |
|      |     | 3200 |
|      |     | 3300 |
|      |     | 3400 |
|      |     | 3500 |
|      |     | 3600 |
|      |     | 3700 |
|      |     | 3800 |
|      |     | 3900 |
|      |     | 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

3 sp. Red Prawns  
 3 Sea Urchin  
 1 crab. 1 small fish  
 3 shells  
 Net came up full of mud

107.

No. 2632 Hy. Date April 12/91.  
 Sighted Machine. Reel. Starry.

Turns 796 Cor. + 42 Depth 1838 fm.

Shot or lead 38 lb.

Bottom gn. M.

Bottom temperature 38.5

No. of thermometer 66735 Cor.

Corrected temperature 38.5

Air 79° Surface 80° Drift

Trawl or dredge

| SOUNDING WIRE. |        | TURNS. | DREDGE ROPE. |     |
|----------------|--------|--------|--------------|-----|
| DOWN.          | UP.    |        | DOWN.        | UP. |
| 6-05-0         | 25-0   | 0      |              |     |
| 06-0           | 24-0   | 100    |              |     |
| 07-0           | 23-0   | 200    |              |     |
| 08-0           | 22-30  | 300    |              |     |
| 09-0           | 21-0   | 400    |              |     |
| 10-0           | 19-15  | 500    |              |     |
| 11-0           | 18-15  | 600    |              |     |
| 12-0           | 17-15  | 700    |              |     |
| 13-0           | 6-16-0 | 796    |              |     |
|                |        | 800    |              |     |
|                |        | 900    |              |     |
|                |        | 1000   |              |     |
|                |        | 1100   |              |     |
|                |        | 1200   |              |     |
|                |        | 1300   |              |     |
|                |        | 1400   |              |     |
|                |        | 1500   |              |     |
|                |        | 1600   |              |     |
|                |        | 1700   |              |     |
|                |        | 1800   |              |     |
|                |        | 1900   |              |     |
|                |        | 2000   |              |     |
|                |        | 2100   |              |     |
|                |        | 2200   |              |     |
|                |        | 2300   |              |     |
|                |        | 2400   |              |     |

|      |    |      |  |
|------|----|------|--|
|      |    | 2500 |  |
|      |    | 2600 |  |
|      |    | 2700 |  |
|      |    | 2800 |  |
|      |    | 2900 |  |
|      |    | 3000 |  |
|      |    | 3100 |  |
|      |    | 3200 |  |
|      |    | 3300 |  |
|      |    | 3400 |  |
| 2946 | 88 | 3500 |  |
| 796  | 46 | 3600 |  |
| 2150 | 42 | 3700 |  |
|      |    | 3800 |  |
|      |    | 3900 |  |
|      |    | 4000 |  |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

~~No. 3420 Dr. Date~~

No. 3420 Dr. Date April 12/91

Dredge Machine Reel.

Start.

Turns 630 Cor. + 34 Depth 66 1/4 fathoms.

Shot or lead 38 lb.

Bottom dk. gn. M.

Bottom temperature 39°

No. of thermometer 66735. Cor. -

Corrected temperature 39.6 Mag.

Air 81° Surface 82° Drift E. x S. 7/10 m.

Trawl or dredge

Small Beam

| SOUNDING WIRE.<br>DOWN. | W. D.  | UP. ° | TURNS. | DREDGE ROPE. |         |
|-------------------------|--------|-------|--------|--------------|---------|
|                         |        |       |        | DOWN.        | UP.     |
| 7-26-30                 | 41-15  |       | 0      | 7-48-0       | 39.00   |
| 24-30                   | 40-20  |       | 100    | 52-0         | 35.30   |
| 28-30                   | 39-30  |       | 200    | 57-0         | 32.30   |
| 29-30                   | 38-30  |       | 300    | 8-0-0        | 29.00   |
| 30-30                   | 37-30  |       | 400    | 03.30        | 26.00   |
| 31-30                   | 36-30  |       | 500    | 07.15        | 23.00   |
| 32-30                   | 35-30  |       | 600    | 11.00        | 20.00   |
| 33-0                    | 7-30-0 |       | 700    | 14.45        | 16.30   |
|                         |        |       | 800    | 18.45        | 12.00   |
|                         |        |       | 900    | 22.45        | 07.00   |
|                         |        |       | 1000   | 26.30        | 9.03.00 |
|                         |        |       | 1100   |              |         |
|                         |        |       | 1200   |              |         |
|                         |        |       | 1300   |              |         |
|                         |        |       | 1400   |              |         |
|                         |        |       | 1500   |              |         |
|                         |        |       | 1600   |              |         |
|                         |        |       | 1700   |              |         |
|                         |        |       | 1800   |              |         |
|                         |        |       | 1900   |              |         |
|                         |        |       | 2000   |              |         |
|                         |        |       | 2100   |              |         |
|                         |        |       | 2200   |              |         |
|                         |        |       | 2300   |              |         |
|                         |        |       | 2400   |              |         |

|        |      |      |
|--------|------|------|
| 2946.  | 88.  | 2500 |
| 630.   | 84.. | 2600 |
| 23.16. | 34.  | 2700 |
|        |      | 2800 |
|        |      | 2900 |
|        |      | 3000 |
|        |      | 3100 |
|        |      | 3200 |
|        |      | 3300 |
|        |      | 3400 |
|        |      | 3500 |
|        |      | 3600 |
|        |      | 3700 |
|        |      | 3800 |
|        |      | 3900 |
|        |      | 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

1 Octopus.  
2 medusae.

Net evidently dragged into deeper water before getting anything in it.

No. 2633 Hyd. Date April 12<sup>th</sup> 1891.

Sig. bee Machine. Recd. Navy.

Turns 866 Cor. + 144 Depth 912 fms.

Shoot or lead 38 lbs.

Bottom dk. gn. M.

Bottom temperature 37°.

No. of thermometer 66°, 35° Cor.

Corrected temperature 37.0°.

Air 82° Surface 82° Drift

Trawl or dredge

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |     |
|----------------|----------|--------|--------------|-----|
| DOWN.          | UP.      |        | DOWN.        | UP. |
| 9. 42.30       | 01.00    | 0      |              |     |
| 43.15          | 00.00.00 | 100    |              |     |
| 44.10          | 59.15    | 200    |              |     |
| 45.00          | 58.30    | 300    |              |     |
| 46.00          | 57.45    | 400    |              |     |
| 46.50          | 57.00    | 500    |              |     |
| 47.00          | 56.10    | 600    |              |     |
| 49.00          | 55.15    | 700    |              |     |
| 51.00          | 54.15    | 800    |              |     |
|                | 53.50    | 900    |              |     |
|                |          | 1000   |              |     |
|                |          | 1100   |              |     |
|                |          | 1200   |              |     |
|                |          | 1300   |              |     |
|                |          | 1400   |              |     |
|                |          | 1500   |              |     |
|                |          | 1600   |              |     |
|                |          | 1700   |              |     |
|                |          | 1800   |              |     |
|                |          | 1900   |              |     |
|                |          | 2000   |              |     |
|                |          | 2100   |              |     |
|                |          | 2200   |              |     |
|                |          | 2300   |              |     |
|                |          | 2400   |              |     |

29.05

|    |      |
|----|------|
| 40 | 2500 |
| 40 | 2600 |
| 40 | 2700 |
| 40 | 2800 |
| 40 | 2900 |
|    | 3000 |
|    | 3100 |
|    | 3200 |
|    | 3300 |
|    | 3400 |
|    | 3500 |
|    | 3600 |
|    | 3700 |
|    | 3800 |
|    | 3900 |
|    | 4000 |

## SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 1134 by <sup>L</sup> - Date of pull 13<sup>rd</sup> 1871.  
Digbee Machine Recd. Navy.

Turns 570 Cor. + 32 Depth 602 fms.

Shot or lead 38 lbs.

Bottom dk. gn. M.

Bottom temperature 40.0 -

No. of thermometer 66735 Cor. -

Corrected temperature 40.0 -

Air 81° Surface 82° Drift

Trawl or dredge

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |     |
|----------------|----------|--------|--------------|-----|
| DOWN.          | UP.      |        | DOWN.        | UP. |
| 10.42.00       | 55.00    | 0      |              |     |
| 43.05          | 54.05    | 100    |              |     |
| 44.00          | 53.15    | 200    |              |     |
| 45.00          | 52.25    | 300    |              |     |
| 46.00          | 51.30    | 400    |              |     |
| 47.05          | 50.30    | 500    |              |     |
| 47.50          | 10.49.45 | 570    |              |     |
|                |          | 600    |              |     |
|                |          | 700    |              |     |
|                |          | 800    |              |     |
|                |          | 900    |              |     |
|                |          | 1000   |              |     |
|                |          | 1100   |              |     |
|                |          | 1200   |              |     |
|                |          | 1300   |              |     |
|                |          | 1400   |              |     |
|                |          | 1500   |              |     |
|                |          | 1600   |              |     |
|                |          | 1700   |              |     |
|                |          | 1800   |              |     |
|                |          | 1900   |              |     |
|                |          | 2000   |              |     |
|                |          | 2100   |              |     |
|                |          | 2200   |              |     |
|                |          | 2300   |              |     |
|                |          | 2400   |              |     |

2946  
570

|    |      |
|----|------|
| 88 | 2500 |
| 56 | 2600 |
| 2  | 2700 |
| 1  | 2800 |
| 65 | 2900 |
|    | 3000 |
|    | 3100 |
|    | 3200 |
|    | 3300 |
|    | 3400 |
|    | 3500 |
|    | 3600 |
|    | 3700 |
|    | 3800 |
|    | 3900 |
|    | 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 3421 P. Date April 16<sup>th</sup> 1911.  
Sledge Machine Reel. Navy.

Turns 67 Cor. + 21 Depth 38 m.  
Shot or lead 38 lbs.  
Bottom dk. gr. M.  
Bottom temperature 43.1.  
No. of thermometer 66 735 Cor. -...  
Corrected temperature 42.9 <sup>1/2 mile. May</sup>  
Air 52 Surface 52 Drift N. E.  $\frac{3}{4}$  E.  
Trawl or dredge small bottom

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE |         |
|----------------|-------|--------|-------------|---------|
| DOWN.          | UP.   |        | DOWN.       | UP.     |
| 11.32          | 32    | 0      | 11.32.30    | 16.30   |
| 30.47          | 31.50 | 100    | 31.31       | 16.5    |
| 55.52          | 57.50 | 200    | 40.07       | 16.20   |
|                | 59.57 | 300    | 43.30       | 09.00   |
|                | 61.52 | 350    | 47.00       | 04.50   |
|                |       | 400    |             | 2.03.00 |
|                |       | 500    |             |         |
|                |       | 600    |             |         |
|                |       | 700    |             |         |
|                |       | 800    |             |         |
|                |       | 900    |             |         |
|                |       | 1000   |             |         |
|                |       | 1100   |             |         |
|                |       | 1200   |             |         |
|                |       | 1300   |             |         |
|                |       | 1400   |             |         |
|                |       | 1500   |             |         |
|                |       | 1600   |             |         |
|                |       | 1700   |             |         |
|                |       | 1800   |             |         |
|                |       | 1900   |             |         |
|                |       | 2000   |             |         |
|                |       | 2100   |             |         |
|                |       | 2200   |             |         |
|                |       | 2300   |             |         |
|                |       | 2400   |             |         |

2946  
- 367  
2580

88  
67  
21  
368

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

4 day small Macraeo, 12°.

No. 3425 Date April 12, 1891  
 Hostess Machine Reel Trawl  
 Turns 133 Cor. + 8 Depth 14 1 fms  
 Shot or lead 38 lbs  
 Bottom gn. m  
 Bottom temperature 53.5  
 No. of thermometer 66736 Cor. -0.2  
 Corrected temperature 53.3  
 Air 84 Surface 83 Drift -  
 Trawl or dredge Small beam and scratch

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |           |
|----------------|----------|--------|--------------|-----------|
| P.M DOWN.      | P.M UP.  |        | DOWN.        | UP.       |
| 12.28 00       | 3200     | 0      | 12.31 00     | 16.00     |
| 29. 00         | 31 00    | 100    | 39.25        | 16.00     |
| 29. 10         | 12.30.45 | 133    |              |           |
|                |          | 200    | 43.35        | 131 00.15 |
|                |          | 300    |              |           |
|                |          | 400    |              |           |
|                |          | 500    |              |           |
|                |          | 600    |              |           |
|                |          | 700    |              |           |
|                |          | 800    |              |           |
|                |          | 900    |              |           |
|                |          | 1000   |              |           |
|                |          | 1100   |              |           |
|                |          | 1200   |              |           |
|                |          | 1300   |              |           |
|                |          | 1400   |              |           |
|                |          | 1500   |              |           |
|                |          | 1600   |              |           |
|                |          | 1700   |              |           |
|                |          | 1800   |              |           |
|                |          | 1900   |              |           |
|                |          | 2000   |              |           |
|                |          | 2100   |              |           |
|                |          | 2200   |              |           |
|                |          | 2300   |              |           |
|                |          | 2400   |              |           |

21°  
33  
28° 3  
83  
81

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

3 Macrurus  
1 Squid  
1 Flomida

No. 11 Date 11  
 the vessel Machine Reel. 94 fms.  
 Turns 80 Cor. + 5 Depth 94 fms.  
 Shot or lead 38 lb  
 Bottom 5 m.  
 Bottom temperature 56°  
 No. of thermometer 66 73.5 Cor. - 0.2  
 Corrected temperature 55.8 -  
 Air 84 Surface 83 Drift -  
 Trawl or dredge

## SOUNDING WIRE.

| 1500    | 1500    | TURNS. | 1500    | DREDGE ROPE. |
|---------|---------|--------|---------|--------------|
| DOWN.   | UP.     |        | DOWN.   | UP.          |
| 1.31.00 | 31.00   | 0      | 1.31.00 |              |
| 29.00   | 1.29.10 | 100    | 37.00   | 01.20        |
|         |         | 150    | 39.30   | 2.00.00      |
|         |         | 200    |         |              |
|         |         | 250    |         |              |
|         |         | 300    | 44.00   | 6            |
|         |         | 400    |         |              |
|         |         | 500    |         |              |
|         |         | 600    |         |              |
|         |         | 700    |         |              |
|         |         | 800    |         |              |
|         |         | 900    |         |              |
|         |         | 1000   |         |              |
|         |         | 1100   |         |              |
|         |         | 1200   |         |              |
|         |         | 1300   |         |              |
|         |         | 1400   |         |              |
|         |         | 1500   |         |              |
|         |         | 1600   |         |              |
|         |         | 1700   |         |              |
|         |         | 1800   |         |              |
|         |         | 1900   |         |              |
|         |         | 2000   |         |              |
|         |         | 2100   |         |              |
|         |         | 2200   |         |              |
|         |         | 2300   |         |              |
|         |         | 2400   |         |              |

20° 6'  
80  
- 28 55'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

1 sp. Crat  
1 sp. Frix

700 fathoms  
100 fms

No.  $17^{\circ} 39' 30''$  N. Date April 16/91.  
 $102^{\circ} 11' 30''$  W. Machine. Reel.

Turns Cor. + Depth 730

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air. 77 Surface 76 Drift

Trawl or dredge Bottom trawl. In Net

| SOUNDING WIRE |      | TURNS. | DREDGE ROPE. |     |
|---------------|------|--------|--------------|-----|
| DOWN.         | UP.  |        | DOWN.        | UP. |
| 10-10-0       | 47-0 | 0      |              |     |
|               |      | 100    |              |     |
|               |      | 200    |              |     |
|               |      | 230    |              |     |
|               |      | 300    |              |     |
|               |      | 400    |              |     |
|               |      | 500    |              |     |
|               |      | 600    |              |     |
|               |      | 700    |              |     |
|               |      | 800    |              |     |
|               |      | 900    |              |     |
|               |      | 1000   |              |     |
|               |      | 1100   |              |     |
|               |      | 1200   |              |     |
|               |      | 1300   |              |     |
|               |      | 1400   |              |     |
|               |      | 1500   |              |     |
|               |      | 1600   |              |     |
|               |      | 1700   |              |     |
|               |      | 1800   |              |     |
|               |      | 1900   |              |     |
|               |      | 2000   |              |     |
|               |      | 2100   |              |     |
|               |      | 2200   |              |     |
|               |      | 2300   |              |     |
|               |      | 2400   |              |     |

The sub-marine tow net was dropped  
16 minutes after a depth of 176 fms. Brisk  
gusts and lower net failed to close.

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Few pteropods - 2 species.  
 " small amphidora - 2 sp.  
 Sagitta, etc.

No. 2635 Hyg. Date

Machine. Reel. No. 11

Turns 1900 Cor. + 78 Depth 12 fms.

Shot or lead 60 lbs.

Bottom dk. gn. m.

Bottom temperature 36.0

No. of thermometer 66 7.35 Cor. -

Corrected temperature 36.0

Air 72 Surface 74 Drift

Trawl or dredge

| SOUNDING WIRE. |         | TURNS.       | DREDGE ROPE. |     |
|----------------|---------|--------------|--------------|-----|
| DOWN.          | UP.     |              | DOWN.        | UP. |
|                | 47.00   | 0            |              |     |
| 06.10          | 46.05   | 100          |              |     |
| 07.10          | 45.30   | 200          |              |     |
| 08.05          | 44.50   | 300          |              |     |
| 09.05          | 44.10   | 400          |              |     |
| 10.00          | 43.30   | 500          |              |     |
| 10.55          | 42.50   | 600          |              |     |
| 11.45          | 42.00   | 700          |              |     |
| 12.40          | 41.15   | 800          |              |     |
| 13.35          | 40.20   | 900          |              |     |
| 14.40          | 39.30   | 1000         |              |     |
| 15.45          | 38.35   | 1100         |              |     |
| 16.50          | 37.35   | 1200         |              |     |
| 18.00          |         | 1300         |              |     |
| 19.10          | 35.35   | 1400         |              |     |
| 20.15          | 34.20   | 1500         |              |     |
| 21.30          | 33.10   | 1600         |              |     |
| 22.45          | 31.50   | 1700         |              |     |
| 24.05          | 30.30   | 1800         |              |     |
| 26.00          | 28.45   | 1900         |              |     |
| 26.45          | 5.27.30 | 1984<br>2000 |              |     |
|                |         | 2100         |              |     |
|                |         | 2200         |              |     |
|                |         | 2300         |              |     |
|                |         | 2400         |              |     |

2946.

19.44

141.00

141.00

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

## SERIAL TEMPERATURES.

| ALT. (ft.) | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|------------|-------|--------------|------|------------|
| 25         | 65.4  | 1            | 0    | 65.4       |
| 50         | 59.3  | 2            | -0.5 | 59.0       |
| 100        | 54.6  | 3            | -0.5 | 54.1       |
| 200        | 50.2  | 4            | -0.5 | 49.7       |
| 300        | 47.5  | 5            | -0.5 | 47.0       |
| 400        | 45.5  | 6            | -0.5 | 45.0       |
| 500        | 43.5  | 7            | -0.5 | 43.0       |
| 600        | 41.6  | 8            | -0.5 | 41.1       |
| 700        | 39.7  | 9            | -0.5 | 39.2       |
| 800        | 37.9  | 10           | -0.5 | 37.4       |
| 900        | 36.2  | 11           | -0.5 | 35.7       |
| 1000       | 37.2  | 12           | -0.5 | 36.7       |

REMARKS:

No. 2621 Date 11-1-00  
 Dredge Machine Reel 1000  
 Turns 2022 Cor. + 80 Depth 2102  
 Shot or lead 35-lb  
 Bottom grn. with 6k sp.  
 Bottom temperature  
 No. of thermometer 66.73 Cor. -  
 Corrected temperature 35.8  
 Air 73 Surface 74 Drift  
 Trawl or dredge

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |     |
|----------------|-------|--------|--------------|-----|
| DOWN.          | UP.   |        | DOWN.        | UP. |
|                | 36.00 | 0      |              |     |
| 50.20          | 34.10 | 100    |              |     |
| 51.50          | 33.70 | 200    |              |     |
|                | 33.45 | 300    |              |     |
|                | 32.45 | 400    |              |     |
| 52.20          | 32.20 | 500    |              |     |
| 53.45          | 31.15 | 600    |              |     |
|                | 30.70 | 700    |              |     |
| 54.05          | 29.20 | 800    |              |     |
| 54.50          | 28.70 | 900    |              |     |
|                | 28.50 | 1000   |              |     |
| 55.00          | 27.70 | 1100   |              |     |
|                | 26.75 | 1200   |              |     |
|                | 25.75 | 1300   |              |     |
| 56.00          | 24.75 | 1400   |              |     |
|                | 23.75 | 1500   |              |     |
| 56.50          | 22.75 | 1600   |              |     |
| 57.00          | 21.75 | 1700   |              |     |
| 57.50          | 20.75 | 1800   |              |     |
| 58.00          | 19.75 | 1900   |              |     |
|                | 18.75 | 2000   |              |     |
| 58.50          | 17.75 | 2100   |              |     |
|                | 16.75 | 2200   |              |     |
|                | 15.75 | 2300   |              |     |
|                | 14.75 | 2400   |              |     |

*2946  
2022  
924*

*80*

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 721 Date Apr 18 1911  
 Seabee Machine. Reel. 100.  
 Turns 6 Cor. + .38 Depth 676'.  
 Shot or lead 35 lb.  
 Bottom 9° S the water much warmer.  
 Bottom temperature 38°.  
 No. of thermometer 66738 Cor.  
 Corrected temperature 38.0 -  
 Air 76 Surface 76 Drift 1 K N.W.  
 Trawl or dredge Dredge 13 sec.

| SOUNDING WIRE. |       |        | DREDGE ROPE. |         |  |
|----------------|-------|--------|--------------|---------|--|
| DOWN.          | UP.   | TURNS. | DOWN.        | UP.     |  |
| 11.02 00       | 15.10 | 0      | 11.18.10     | 1       |  |
| 02 55          | 14.40 | 100    | 22.210       |         |  |
|                | 14.10 | 200    | 26.10        | 1-6     |  |
| 11 50          | 12.25 | 300    | 30.15        | 56-0    |  |
|                | 13.00 | 400    | 34.20        |         |  |
| 11.08          | 12.30 | 500    | 38           |         |  |
|                | 11.10 | 600    |              |         |  |
|                | 11.16 | 700    |              |         |  |
|                |       | 800    | 5%           | 12-11.0 |  |
|                |       | 900    |              |         |  |
|                |       | 1000   |              |         |  |
|                |       | 1100   |              |         |  |
|                |       | 1200   |              |         |  |
|                |       | 1300   |              |         |  |
|                |       | 1400   |              |         |  |
|                |       | 1500   |              |         |  |
|                |       | 1600   |              |         |  |
|                |       | 1700   |              |         |  |
|                |       | 1800   |              |         |  |
|                |       | 1900   |              |         |  |
|                |       | 2000   |              |         |  |
|                |       | 2100   |              |         |  |
|                |       | 2200   |              |         |  |
|                |       | 2300   |              |         |  |
|                |       | 2400   |              |         |  |

2946  
638  
~~2208~~  
50  
38

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

1 deg. Macrurus,  
10 m. (Ctenotela (crinoids))  
1 m. sp. frag.  
3 m. Pycnogonid  
2 m. Anthozoa  
2 m. coelenterate, open

No.

24 50 P. Date

Machine.

Reel.

C.P.

Turns 645 Cor. + 15 Depth 686 fms

Shot or lead 58 lbs

Bottom 4.10

Bottom temperature 5

No. of thermometer 66 Cor.

Corrected temperature 39.0

Air 75 Surface 76 Drift  $\frac{1}{2}$  N N W

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |       |
|----------------|-----|--------|--------------|-------|
| DOWN.          | UP. |        | DOWN.        | UP.   |
|                |     | 0      | 4.0          |       |
|                |     | 100    | 7-20         |       |
|                |     | 200    | 0-30         | 20    |
|                |     | 300    | 0-30         |       |
|                |     | 400    | 17-30        | 14-20 |
|                |     | 500    | -            |       |
|                |     | 600    | 34-0         | 08-0  |
|                |     | 700    | 18-30        | 04    |
|                |     | 800    | 13-0         | 0-0   |
|                |     | 900    | -            |       |
|                |     | 1000   | -            |       |
|                |     | 1100   | -            |       |
|                |     | 1200   | -            |       |
|                |     | 1300   | -            |       |
|                |     | 1400   | -            |       |
|                |     | 1500   | -            |       |
|                |     | 1600   | -            |       |
|                |     | 1700   | -            |       |
|                |     | 1800   | -            |       |
|                |     | 1900   | -            |       |
|                |     | 2000   | -            |       |
|                |     | 2100   | -            |       |
|                |     | 2200   | -            |       |
|                |     | 2300   | -            |       |
|                |     | 2400   | -            |       |

29.16

6

501

2500

2600

2700

2500

200

300

348

25/20

3(1)(x)

3700

3800

3900

4000

CMPE

### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

## REMARKS

No. 3456 A Date

Divided Machine Reel. Name.

Turns 188 Cor. + 8 Depth 146

Shot or lead 85 lbs

Bottom ~~bottom~~ Rely.

Bottom temperature 51.4

No. of thermometer 66 1/3 Cor. -0.2

Corrected temperature 51.2

Air 75 Surface 76 Drift

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

1 Immense Rock  
No Therm. No Therm.

No.

Date

April 15, 1881

Cutting Engine Machine.

Reel.

Turns Cor. +

Depth 80 fms.

Shot or lead Tangle Drags -

Bottom Key.

Bottom temperature 51.4

No. of thermometer 66 73.5 Cor. 0.7

Corrected temperature 51.2 4/10 mile.

Air 75 Surface 76 Drift 7

Trawl or dredge 9.00

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |         |
|----------------|-------|--------|--------------|---------|
| DOWN.          | UP.   |        | DOWN.        | UP.     |
| 3. 06. 30      | 42.00 | 0      | 4.03.00      | 23.0    |
| 37. 41         | 3.30  | 100    | 07.30        | 4.19.00 |
|                |       | 200    |              |         |
|                |       | 300    |              |         |
|                |       | 400    |              |         |
|                |       | 500    |              |         |
|                |       | 600    |              |         |
|                |       | 700    |              |         |
|                |       | 800    |              |         |
|                |       | 900    |              |         |
|                |       | 1000   |              |         |
|                |       | 1100   |              |         |
|                |       | 1200   |              |         |
|                |       | 1300   |              |         |
|                |       | 1400   |              |         |
|                |       | 1500   |              |         |
|                |       | 1600   |              |         |
|                |       | 1700   |              |         |
|                |       | 1800   |              |         |
|                |       | 1900   |              |         |
|                |       | 2000   |              |         |
|                |       | 2100   |              |         |
|                |       | 2200   |              |         |
|                |       | 2300   |              |         |
|                |       | 2400   |              |         |

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Small Crabs.  
Argonias.

No. 2428 D<sup>2</sup>. Date April 18<sup>th</sup> 1891

Machine. Reel. Varf.

Turns 225 Cor. + 13 Depth 238 fms.

Shot or lead 38 lbs.

Bottom dr. gg. s. & Glob.

Bottom temperature 48.3 -

No. of thermometer 66.735 Cor. - 0.2

Corrected temperature 48.1

Air 75 Surface 76 Drift 75.1 1.6

Trawl or dredge 7m. 11 fms. 7 Sust. 7

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |       |
|----------------|----------|--------|--------------|-------|
| DOWN.          | UP.      |        | PM.          | DOWN. |
| 31.15          | 27.15    | 0      | 6.40.00      | 33.00 |
| 33.15          | 36.15    | 100    | 44.3         | 23.00 |
| 33.15          | 35.15    | 200    | 11.1         | 24.00 |
| 33.3           | 6.3.5.00 | 300    | 52.1         | 20.00 |
|                |          | 400    | 51.3         | 16.3  |
|                |          | 500    | 7.1.1        | 1.1.1 |
|                |          | 600    |              |       |
|                |          | 700    |              |       |
|                |          | 800    |              |       |
|                |          | 900    |              |       |
|                |          | 1000   |              |       |
|                |          | 1100   |              |       |
|                |          | 1200   |              |       |
|                |          | 1300   |              |       |
|                |          | 1400   |              |       |
|                |          | 1500   |              |       |
|                |          | 1600   |              |       |
|                |          | 1700   |              |       |
|                |          | 1800   |              |       |
|                |          | 1900   |              |       |
|                |          | 2000   |              |       |
|                |          | 2100   |              |       |
|                |          | 2200   |              |       |
|                |          | 2300   |              |       |
|                |          | 2400   |              |       |

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

1. Shrimp  
2. Pelagic

No. 3429 N. Date 4/1

Machine. Reel. 1100  
 Turns Cor. + 1100 Depth 715  
 Shot or lead . . . . . 67. Pts.  
 Bottom . . . 2 glib. 0g. with bottom rocky.  
 Bottom temperature 37  
 No. of thermometer 667 Cor.  
 Corrected temperature 37.5  
 Air 73 Surface Drift NW X 6  
 Trawl or dredge 2m

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |         |
|----------------|-------|--------|--------------|---------|
| DOWN.          | UP.   |        | DOWN.        | UP.     |
| 0              | 0     | 0      | 0            | 0       |
| 100            | 100   | 100    | 47.53        | 49.30   |
| 200            | 24.25 | 200    | 51.55        | 52.5    |
| 300            | 23.35 | 300    | 55.15        | 36.10   |
| 400            | 22.45 | 400    | 61.04.00     | 50.30   |
| 500            | 21.55 | 500    | 67.35        | 27.00   |
| 600            | 20.65 | 600    | 72.05        | 11.15   |
| 700            | 19.45 | 700    | 76.20        | 7.01.20 |
| 800            | 18.45 | 800    | 81.55        |         |
| 900            | 17.45 | 900    | 89.53        |         |
| 1000           | 16.45 | 1000   | 94.20        |         |
| 1100           | 15.45 | 1100   | 100.00       |         |
| 1200           | 14.45 | 1200   | 104.55       |         |
| 1300           | 13.45 | 1300   | 110.15       |         |
| 1400           | 12.45 | 1400   | 116.50       |         |
|                |       | 1500   |              |         |
|                |       | 1600   |              |         |
|                |       | 1700   |              |         |
|                |       | 1800   |              |         |
|                |       | 1900   |              |         |
|                |       | 2000   |              |         |
|                |       | 2100   |              |         |
|                |       | 2200   |              |         |
|                |       | 2300   |              |         |
|                |       | 2400   |              |         |

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

*Sargassum* with long, thin blades  
*Juncum* — net form

No.

Date

Machine. Reel.

Turns Cor. + 42 Depth 30 f.

Shot or lead 35 lbs

Bottom 8k s.

Bottom temperature 87 2

No. of thermometer 66735 Cor. -

Corrected temperature 37. "

Air 74 Surface 73 Drift N. N.

Trawl or dredge

| SOUNDING WIRE. |        | TURNS. | DREDGE ROPE. |         |
|----------------|--------|--------|--------------|---------|
| DOWN.          | UP.    |        | DOWN.        | UP.     |
| 3-11-0         | 21-0   | 0      | 10-17-0      |         |
| 05-0           | 23-0   | 100    | 30-30        | 30. 3   |
| 05-55          | 32-0   | 200    | 34-0         | 27      |
| 06-50          | 20-30  | 300    | 38-0         | 24.00   |
| 08-0           | 18-0   | 400    | 42-0         | 20.30   |
| 09-0           | 17-0   | 500    | 46-0         | 17.00   |
| 10-0           | 16-0   | 600    | 50-0         | 13.30   |
| 11-0           | 15-0   | 700    | 54-0         | 09.15   |
| 12-0           | 3-14-0 | 800    | 58-0         | 05.00   |
|                |        | 840    | 4. 01. 00    | 00. 00  |
|                |        | 900    |              |         |
|                |        | 1000   | 04.30        | 44.45   |
|                |        | 1100   | 08.00        | 40.30   |
|                |        | 1200   | 12.15        | 36.00   |
|                |        | 1300   | 16.30        | 4.31.00 |
|                |        | 1400   |              |         |
|                |        | 1500   |              |         |
|                |        | 1600   |              |         |
|                |        | 1700   |              |         |
|                |        | 1800   |              |         |
|                |        | 1900   |              |         |
|                |        | 2000   |              |         |
|                |        | 2100   |              |         |
|                |        | 2200   |              |         |
|                |        | 2300   |              |         |
|                |        | 2400   |              |         |

|     |    |      |
|-----|----|------|
| 700 | 66 | 2500 |
| 800 | 67 | 2600 |
| 900 | 68 | 2700 |
|     |    | 2800 |
|     |    | 2900 |
|     |    | 3000 |
|     |    | 3100 |
|     |    | 3200 |
|     |    | 3300 |
|     |    | 3400 |
|     |    | 3500 |
|     |    | 3600 |
|     |    | 3700 |
|     |    | 3800 |
|     |    | 3900 |
|     |    | 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              | X    |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              | N.   |            |
| 1000   |       |              |      |            |

REMARKS:

virus. 1 Macrurus, 1 small  
fish, 1 Macrurus, 1 small plat  
fish, 1 small fish, 1 small  
mola mola, 1 large Gorgonid.

No.

Date

12

Nov 13, 1891

Digger Machine Reel. Scale

Turns 948 Cor. + 4% Depth 995 fms

Shot or lead 3 lbs

Bottom 9 ft brown well clay

Bottom temperature 37°

No. of thermometer 66785 Cor. -

Corrected temperature 37.0°

Air 67 Surface Drift 1

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE |       |
|----------------|-----|--------|-------------|-------|
| DOWN.          | UP. |        | DOWN.       | UP.   |
|                |     | 0      |             | 51-6  |
|                |     | 100    |             | 51-6  |
|                |     | 200    |             | 51-30 |
|                |     | 300    |             | 51-6  |
| 15             |     | 400    |             | 51-6  |
|                |     | 500    |             | 57-31 |
|                |     | 600    |             | 51-6  |
|                |     | 700    |             | 51-6  |
|                |     | 800    |             | 51-6  |
|                |     | 900    |             | 51-30 |
|                |     | 1000   |             | 51-30 |
|                |     | 1100   |             | 51-6  |
|                |     | 1200   |             | 51-6  |
|                |     | 1300   |             | 51-6  |
|                |     | 1400   |             | 51-6  |
|                |     | 1500   |             | 51-6  |
|                |     | 1600   |             |       |
|                |     | 1700   |             |       |
|                |     | 1800   |             |       |
|                |     | 1900   |             |       |
|                |     | 2000   |             |       |
|                |     | 2100   |             |       |
|                |     | 2200   |             |       |
|                |     | 2300   |             |       |
|                |     | 2400   |             |       |

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

Cloudy, wind  
Westerly, very  
strong, " " " " " " " "  
water very choppy  
few birds & trains.  
Cloudy, wind  
Westerly, very  
strong, " " " " " " " "

No. 3452 S. Date 11/20/11  
Sledge Machine Reel Navy

Turns 1354 Cor. + 6.2 Depth 1421 fms.

Shot or lead 35 lbs.

Bottom 7m. 76.4°.

Bottom temperature 37.8°

No. of thermometer 66735 Cor. -

Corrected temperature 37.8°

Air 72° Surface 70° Drift

Trawl or dredge

SOUNDING WIRE.

| J.T.<br>DOWN. | UP.     |
|---------------|---------|
| 2.01.00       | 31.00   |
| 3.01.00       | 30.15   |
| 03.20         | 29.35   |
| 04.20         | 29.00   |
| 05.30         | 28.15   |
| 06.35         | 27.30   |
| 07.45         | 26.45   |
| 8.00          | 25.60   |
| 19.10         | 25.05   |
| 11.20         | 24.10   |
| 12.40         | 23.15   |
| 14.00         | 22.15   |
| 15.20         | 21.15   |
| 16.45         | 20.10   |
| 18.00         | 2.19.30 |

TURN.

| J.T.<br>DOWN. | UP. | DREDGE  | ROPE    |
|---------------|-----|---------|---------|
| 0             |     | 2.38.00 |         |
| 100           |     | 42.00   |         |
| 200           |     | 46.00   |         |
| 300           |     | 49.00   |         |
| 400           |     | 53.00   |         |
| 500           |     | 56.00   |         |
| 600           |     | 3.06.00 |         |
| 700           |     | 63.00   |         |
| 800           |     | 67.10   |         |
| 900           |     | 11.30   |         |
| 1000          |     | 15.10   |         |
| 1100          |     | 19.10   |         |
| 1200          |     | 23.10   |         |
| 1300          |     | 27.10   |         |
| 1400          |     | 31.00   |         |
| 1500          |     | 34.00   |         |
| 1600          |     | 37.20   | 0.00.00 |
| 1700          |     | 41.00   |         |
| 1800          |     | 45.00   |         |
| 1900          |     | 51.00   |         |
| 2000          |     | 55.15   |         |
| 2100          |     | 4.00.10 |         |
| 2200          |     |         |         |
| 2300          |     |         |         |
| 2400          |     |         |         |

|      |             |      |  |
|------|-------------|------|--|
| 2946 |             | 2500 |  |
| 1354 | <u>26</u>   | 2600 |  |
| 1587 | <u>62</u>   | 2700 |  |
|      | <u>1352</u> | 2800 |  |
|      | <u>1421</u> | 2900 |  |
|      |             | 3000 |  |
|      |             | 3100 |  |
|      |             | 3200 |  |
|      |             | 3300 |  |
|      |             | 3400 |  |
|      |             | 3500 |  |
|      |             | 3600 |  |
|      |             | 3700 |  |
|      |             | 3800 |  |
|      |             | 3900 |  |
|      |             | 4000 |  |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     | 51.0  |              |      |            |
| 100    |       |              |      |            |
| 200    | 51.0  |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

7 sp. Holothurians  
2 sp. Ctenophores  
1 ctenophore - dead & broken

No.

Date

Dredged Machine Reel 2400 ft

Turns 116 Cor. + 56 Depth 121 fms

Shot or lead 35 lbs

Bottom

Bottom temperature 36°

No. of thermometer 66735 Cor. -

Corrected temperature 36.5°

Air 71 Surface 61 Drift 1.5 m N

Trawl or dredge

Cone Beam

| SOUNDING WIRE |     | TURNS. | DREDGE ROPE |         |
|---------------|-----|--------|-------------|---------|
| DOWN.         | UP. |        | DOWN.       | UP.     |
|               |     | 0      | 6-34-0      | 32.00   |
|               |     | 100    | 38-0        | 28.15   |
|               |     | 200    | 42-0        | 25.15   |
|               |     | 300    | 45-0        | 22.00   |
|               |     | 400    | 49-0        | 19.00   |
|               |     | 500    | 53-30       | 16.00   |
|               |     | 600    | 57-0        | 11.15   |
|               |     | 700    | 7-0-30      | 07.30   |
|               |     | 800    | 14-30       | 03.45   |
|               |     | 900    | 08-0        | 9.00.00 |
|               |     | 1000   | -12-0       | 57.00   |
|               |     | 1100   | 16-0        | 53.45   |
|               |     | 1150   | 3-0         | 5.00    |
|               |     | 1200   | 25-0        | 46.30   |
|               |     | 1300   | 24-0        | 42.00   |
|               |     | 1400   | 33-0        | 38.15   |
|               |     | 1500   | 37-0        | 34.30   |
|               |     | 1600   | 11-0        | 30.30   |
|               |     | 1700   | 1800        | 8.26.00 |
|               |     | 1800   | 1800        |         |
|               |     | 1900   | 18-0        |         |
|               |     | 2000   |             |         |
|               |     | 2100   |             |         |
|               |     | 2200   |             |         |
|               |     | 2300   |             |         |
|               |     | 2400   |             |         |

Sounding Wire Place

Dredge Position

Down 645 0

Up 7-11 0

|       |    |      |  |
|-------|----|------|--|
|       | 66 | 2500 |  |
| 116.2 | 52 | 2600 |  |
| 175.6 | 56 | 2700 |  |
| 116.2 |    | 2800 |  |
| 121.5 |    | 2900 |  |
|       |    | 3000 |  |
|       |    | 3100 |  |
|       |    | 3200 |  |
|       |    | 3300 |  |
|       |    | 3400 |  |
|       |    | 3500 |  |
|       |    | 3600 |  |
|       |    | 3700 |  |
|       |    | 3800 |  |
|       |    | 3900 |  |
|       |    | 4000 |  |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

Westerly wind 7000 feet.

No. 3434 Date Sept. 19, 61  
Dipper Machine Reel. Navy.

Turns 1520 Cor. + Depth 157

Shot or lead 38 lbs.

Bottom fm. M. H. Sp.

Bottom temperature 36.4 -

No. of thermometer 66.735 Cor. -

Corrected temperature 36.4

Air 11 Surface 10 Drift 1/2 N. E. 10'

Trawl or dredge 11

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |       |
|----------------|----------|--------|--------------|-------|
| DOWN.          | UP.      |        | DOWN.        | UP.   |
| 30.5           | 40.45    | 0      | 10.14.00     | 51.30 |
| 31.5           | 49.50    | 100    | 18.15        | 50.50 |
| 32.5           | 49.10    | 200    | 21.30        | 59.0  |
| 33.5           | 48.60    | 300    | 25.15        | 53.0  |
| 34.5           | 47.50    | 400    | 27.15        | 51.0  |
| 35.5           | 46.45    | 500    | 32.45        | 55.30 |
| 43.30          | 06.10    | 600    | 35.15        | 51.0  |
| 44.30          | 05.20    | 700    | 38.45        | 57.00 |
| 45.35          | 04.30    | 800    | 45.00        | 52.00 |
| 46.45          | 03.35    | 900    | 48.45        | 57.00 |
| 47.50          | 02.40    | 1000   | 52.15        | 55.00 |
| 49.10          | 01.40    | 1100   | 57.00        | 57.0  |
| 50.25          | 10.00.30 | 1200   | 11.02.00     | 57.0  |
| 51.50          | 59.30    | 1300   | 05.45        | 45.0  |
| 53.10          | 11.10    | 1400   | 09.15        | 41.0  |
| 54.30          | 07.20    | 1500   | 15.15        | 38.0  |
| 55.50          | 01.10    | 1600   | 1.15         | 36.0  |
|                |          | 1700   | 20.45        | 28.30 |
|                |          | 1800   | 24.15        | 31.00 |
|                |          | 1900   | 28.15        | 31.00 |
|                |          | 2000   | 32.15        | 34.10 |
|                |          | 2100   | 36.15        | 34.00 |
|                |          | 2200   | 40.15        | 34.00 |
|                |          | 2300   | 44.15        | 34.00 |
|                |          | 2400   | 48.15        | 34.00 |

171.

191-

|  |  |  |      |        |       |
|--|--|--|------|--------|-------|
|  |  |  | 2500 | 2 11.5 | 26.65 |
|  |  |  | 2600 | 12.30  | 1.15  |
|  |  |  | 2700 | 28.20  | 11.15 |
|  |  |  | 2800 |        |       |
|  |  |  | 2900 |        |       |
|  |  |  | 3000 |        |       |
|  |  |  | 3100 |        |       |
|  |  |  | 3200 |        |       |
|  |  |  | 3300 |        |       |
|  |  |  | 3400 |        |       |
|  |  |  | 3500 |        |       |
|  |  |  | 3600 |        |       |
|  |  |  | 3700 |        |       |
|  |  |  | 3800 |        |       |
|  |  |  | 3900 |        |       |
|  |  |  | 4000 |        |       |

## SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

## REMARKS:

3 sp. of bathymetra  
2 " Fresh  
1 " warm surface

No. 3 - 35 50 Date 1/1/11  
 Sounding Machine Reel No. 1  
 Turns 817 Cor. + 42 Depth 857 f.  
Shot or lead 38 lbs.  
 Bottom fm. m. & ft. 8/10.  
 Bottom temperature 37.3.  
 No. of thermometer 66 7 35 Cor. +  
 Corrected temperature 37.3.  
 Air 72 Surface 110 Drift 1/10  
 Trawl or dredge Small beam.

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |       |
|----------------|-------|--------|--------------|-------|
| DOWN.          | UP.   |        | DOWN.        | UP.   |
| 04.40          | 19.20 | 6      | 11.15        | 11.15 |
| 05.40          | 18.45 | 100    | 9.00.00      | 56.00 |
| 06.40          | 18.   | 200    | 03.30        | 53.00 |
| 07.45          | 17.15 | 300    | 01.30        | 50.00 |
| 08.45          | 16.30 | 400    | 11.15        | 47.15 |
| 09.40          | 15.30 | 500    | 15.          | 44.30 |
| 10.45          | 14.30 | 600    | 18.45        | 41.00 |
| 11.50          | 13.25 | 700    | 22.30        | 37.30 |
|                |       | 800    | 26.15        | 34.00 |
|                |       | 900    | 30.00        | 31.00 |
|                |       | 1000   | 33.30        | 26.00 |
|                |       | 1100   | 37.45        | 22.30 |
|                |       | 1200   | 41.30        | 18.30 |
|                |       | 1300   | 44.30        | 15.00 |
|                |       | 1400   |              |       |
|                |       | 1500   |              |       |
|                |       | 1600   |              |       |
|                |       | 1700   |              |       |
|                |       | 1800   |              |       |
|                |       | 1900   |              |       |
|                |       | 2000   |              |       |
|                |       | 2100   |              |       |
|                |       | 2200   |              |       |
|                |       | 2300   |              |       |
|                |       | 2400   |              |       |

|      |      |      |  |
|------|------|------|--|
| 2946 | 88   | 2500 |  |
| 2130 | 44   | 2600 |  |
|      | 72   | 2700 |  |
|      | 81.7 | 2800 |  |
|      | 85.9 | 2900 |  |
|      |      | 3000 |  |
|      |      | 3100 |  |
|      |      | 3200 |  |
|      |      | 3300 |  |
|      |      | 3400 |  |
|      |      | 3500 |  |
|      |      | 3600 |  |
|      |      | 3700 |  |
|      |      | 3800 |  |
|      |      | 3900 |  |
|      |      | 4000 |  |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 0      | 65.6  | 61.5         | 0.0  | 65.6       |
| 25     | 65.6  | 61.5         | 0.0  | 65.6       |
| 50     | 65.6  | 61.5         | -0.2 | 65.4       |
| 100    | 54.5  | 51.4         | -0.5 | 53.5       |
| 150    |       |              |      |            |
| 200    |       |              |      |            |
| 300    | 51.0  | 50.4         | -0.5 | 50.0       |
| 400    | 41.7  | 41.4         | -0.1 | 41.6       |
| 500    | 40.5  | 40.4         | -0.1 | 40.4       |
| 600    | 39.5  | 39.4         | 0.0  | 39.4       |
| 700    | 39.0  | 39.4         | -0.1 | 39.3       |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS: 44 (true)

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No. 343 D. J. S. Date April 22<sup>nd</sup> 1891.  
Laguerre Machine. Reel. Navy

Turns 861 Cor. + 44 Depth 905 fms.

Shot or lead 38 lbs

Bottom ~~Average~~

Bottom temperature 27.2

No. of thermometer 66 73.5° Cor.

Corrected temperature 73.5°

Air 75° Surface Drift N. E. 1 m.

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |       |
|----------------|-----|--------|--------------|-------|
| DOWN.          | UP. |        | DOWN.        | UP.   |
| 0              |     | 0      | 3. 10. 20    | 15.00 |
|                |     | 100    | 14.30        | 11.30 |
|                |     | 200    |              |       |
|                |     | 300    | 21.5         | 11.10 |
|                |     | 400    | 26.00        |       |
|                |     | 500    | 1. 7. 0      | 57.0  |
|                |     | 600    | 3.0          | 51.6  |
|                |     | 700    | 36.50        | 11.30 |
|                |     | 800    | 39.05        | 11.6  |
|                |     | 900    | 43.10        | 11.20 |
|                |     | 1000   | 47.55        | 11.0  |
|                |     | 1100   | 51.60        | 11.0  |
|                |     | 1200   | 55.5         | 11.0  |
|                |     | 1250   | 4-4-15       | 11.20 |
|                |     | 1300   |              |       |
|                |     | 1400   |              |       |
|                |     | 1500   |              |       |
|                |     | 1600   |              |       |
|                |     | 1700   |              |       |
|                |     | 1800   |              |       |
|                |     | 1900   |              |       |
|                |     | 2000   |              |       |
|                |     | 2100   |              |       |
|                |     | 2200   |              |       |
|                |     | 2300   |              |       |
|                |     | 2400   |              |       |

P.M.

Water turbid; bottom sand  
Yards 10 fms. at sea level or tidal  
depth 8. in fms. See sketch. about  
800 fms. Water at 100 fms. very  
turbid & black. See sketch  
not clear enough to see bottom  
at the bottom.

|      |       |
|------|-------|
| 2500 | 10.5  |
| 2600 |       |
| 2700 |       |
| 2800 |       |
| 2900 |       |
| 3000 |       |
| 3100 | 0.5   |
| 3200 |       |
| 3300 |       |
| 3400 |       |
| 3500 | 2.0   |
| 3600 |       |
| 3700 | Mud   |
| 3800 | Shall |
| 3900 | Deep  |
| 4000 | Diff  |

## SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

## REMARKS:

large holothurians 2 sp.  
2 sp. okinawans.  
8 sp. sprawns. 2 white anemones  
large fish (Mayura?) small Lycodes,  
Macrurus, etc. Murex crabs  
variety of worms, small shells,

No. 363787

Date April 20, 1881

Dredge Machine.

Reel. Spool.

Turns, 735 Cor. + 56

Depth 177 fms

Shot or lead 38 lbs.

Bottom on m. b. c. s.

Bottom temperature 38°

No. of thermometer 66735 Cor. -

Corrected temperature 38.0°

Air 72 Surface 71 Drift

Trawl or dredge 177 fms. West

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |       |
|----------------|-----|--------|--------------|-------|
| DOWN.          | UP. |        | DOWN.        | UP.   |
| 0              | 10  | 0      | 7-21 0       | 12.50 |
| 100            | 10  | 100    | 55.0         | 66.00 |
| 200            | 10  | 200    | 31.0         | 9.00  |
| 300            | 10  | 300    | 31.0         | 6.00  |
| 400            | 10  | 400    | 4            | 5.00  |
| 500            | 10  | 500    | 4            | 2.70  |
| 600            | 10  | 600    | 17.0         | 8.00  |
| 700            | 10  | 700    | 17.0         | 2.20  |
| 800            | 10  | 800    | 8.02 30      | 1.00  |
| 900            | 10  | 900    | 17.0         | 0     |
| 1000           | dm. | 1000   | dm.          | 0     |
| 1100           | dm. | 1100   | 27.0         | 0     |
| 1200           | dm. | 1200   | dm.          | 0     |
| 1300           |     |        |              |       |
| 1400           |     |        |              |       |
| 1500           |     |        |              |       |
| 1600           |     |        |              |       |
| 1700           |     |        |              |       |
| 1800           |     |        |              |       |
| 1900           |     |        |              |       |
| 2000           |     |        |              |       |
| 2100           |     |        |              |       |
| 2200           |     |        |              |       |
| 2300           |     |        |              |       |
| 2400           |     |        |              |       |

5946.  
755  
 2211  
10  
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88  
5-0  
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785  
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2500  
 2600  
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 4000

Entered down by P. S.  
100 fathoms at a time by filling  
the bottle with water and  
then pouring it out.

Entered down missing

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

A few red shrimp 2 or 3 sp.  
 Mittaeomata  
 Several small sand eels & the  
 surface life

No. 3437 S. Date April 23<sup>rd</sup> 1881-

Dredge Machine. Reel. Navy.

Turns 596 Cor. + Depth 172 fms.

Shot or lead 28 lbs.

Bottom 1m. M. Gr. Sp.

Bottom temperature 40.

No. of thermometer 66 735 Cor. -

Corrected temperature 40.0.

Air 71 Surface 70 Drift

Trawl or dredge full marine bottom.

| SOUNDING WIRE. |         | TURNS. | DREDGE ROPE. |     |
|----------------|---------|--------|--------------|-----|
| DOWN.          | UP.     |        | DOWN.        | UP. |
| 00.00          | 1.00    | 0      |              |     |
| 5.15           | 17.00   | 100    |              |     |
| 06.30          | 16.15   | 200    |              |     |
| 07.45          | 15.25   | 300    |              |     |
| 09.00          | 14.35   | 400    |              |     |
| 10.15          | 13.45   | 500    |              |     |
| 11.25          | 5.12.50 | 600    |              |     |
|                |         | 700    |              |     |
|                |         | 800    |              |     |
|                |         | 900    |              |     |
|                |         | 1000   |              |     |
|                |         | 1100   |              |     |
|                |         | 1200   |              |     |
|                |         | 1300   |              |     |
|                |         | 1400   |              |     |
|                |         | 1500   |              |     |
|                |         | 1600   |              |     |
|                |         | 1700   |              |     |
|                |         | 1800   |              |     |
|                |         | 1900   |              |     |
|                |         | 2000   |              |     |
|                |         | 2100   |              |     |
|                |         | 2200   |              |     |
|                |         | 2300   |              |     |
|                |         | 2400   |              |     |

|          |         |      |
|----------|---------|------|
| 29.06    | 51      | 2500 |
| 296      | 56      | 2600 |
| 23.56    | 32      | 2700 |
|          | 57      | 2800 |
| 1.75     | 57.5    | 2900 |
| Bullock  | 57.5    | 3000 |
| 2.31. 51 | 57.7    | 3100 |
| 2. 15    | 57.15   | 3200 |
| 72.00    | 49.20   | 3300 |
| 46.3.    | 45.5.   | 3400 |
| 36.30    | 41.3.   | 3500 |
| 14.3.    | 34.7.   | 3600 |
| 1.2. 2.  | x 31.00 | 3700 |
| 0.2. 2.  | x 31.13 |      |
| 08.00    | 6.20.30 | 3800 |
|          |         | 3900 |
|          |         | 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR.  | COR. TEMP. |
|--------|-------|--------------|-------|------------|
| 25     | 14.50 | stopper 5    | -0.10 | 14.40      |
| 50     | 14.50 |              |       |            |
| 100    | 14.50 | longer       | -0.10 | 14.40      |
| 200    | 14.50 | 11           | -0.10 | 14.40      |
| 300    |       |              |       |            |
| 400    |       |              |       |            |
| 500    | 14.50 | 116          | -0.10 | 14.40      |
| 600    |       |              |       |            |
| 700    |       |              |       |            |
| 800    | 14.50 | 117          | -0.10 | 14.40      |
| 900    | 14.50 | minister     | -0.10 | 14.40      |
| 1000   | 14.50 | 118          | -0.10 | 14.40      |

Sea Urchins. REMARKS:

Few shrimps. Worm tubes.

Holothurians. few Ophirions.

2 sps. small fish

No.

8/26/90

Date

April 23<sup>rd</sup>

Machine.

Reel.

Turns 590 Cor. + .2 Depth 172 fms.

Shot or lead 38.

Bottom fm. M. Br. Slo-

Bottom temperature 39.2

No. of thermometer 66.7 35 Cor. -

Corrected temperature 39.2

Air 72° Surface 72° Drift

Trawl or dredge Submarine Tow Net

| SOUNDING WIRE. |         | TURNS. | DREDGE ROPE. |     |
|----------------|---------|--------|--------------|-----|
| DOWN.          | UP.     |        | DOWN.        | UP. |
| 06.30          | 24.00   | 0      |              |     |
| 07.20          | 23.20   | 100    |              |     |
| 08.10          | 22.40   | 200    |              |     |
| 09.30          | 21.55   | 300    |              |     |
| 13.15          | 21.10   | 400    |              |     |
| 14.45          | 20.20   | 500    |              |     |
| 17.15          | 7.19.00 | 600    |              |     |
|                |         | 700    |              |     |
|                |         | 800    |              |     |
|                |         | 900    |              |     |
|                |         | 1000   |              |     |
|                |         | 1100   |              |     |
|                |         | 1200   |              |     |
|                |         | 1300   |              |     |
|                |         | 1400   |              |     |
|                |         | 1500   |              |     |
|                |         | 1600   |              |     |
|                |         | 1700   |              |     |
|                |         | 1800   |              |     |
|                |         | 1900   |              |     |
|                |         | 2000   |              |     |
|                |         | 2100   |              |     |
|                |         | 2200   |              |     |
|                |         | 2300   |              |     |
|                |         | 2400   |              |     |

1111

$$\begin{array}{r} 2946 \\ 596 \\ \hline 2360 \end{array}$$

Amm.

|       |       |
|-------|-------|
| 26.00 | 17.0  |
| 31.30 | 16.50 |
| 35.45 | 16.0  |
| 40.00 | 16.30 |
| 44.00 | 13.0  |
| 48.00 | 11.0  |
| 51.00 | 10.50 |

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

100 fathoms  
bottom 10 min.  
50 fathoms 8-11-0  
not enough lower 47-50 m.  
bottom 10 min.  
50 fathoms 8-11-0  
not enough lower 47-50 m.  
bottom 10 min.

Net depth 10-07-0

## SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

## REMARKS:

Few Plankton few small  
5 m. off 100 fath. 10 min.

No. 3433. Date August 18, 1899

Tanner Machine. — Reel. —

Turns 20 Cor. + 0 Depth 20 fms.

Shot or lead. 26 lbs.

Bottom

Bottom temperature 66° 30' + Shells

No. of thermometer 66° 30' Cor. -

Corrected temperature

Air 40° Surface 45° Drift  $\frac{1}{2}$  mi. S.W. by N.

Trawl or dredge (Tug)

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |          |
|----------------|----------|--------|--------------|----------|
| DOWN.          | UP.      |        | DOWN.        | UP.      |
| 10.59.45       | 11.00.30 | 0      | 11.02.45     | 11.00.30 |
|                |          | 60     |              |          |
|                |          | 100    |              |          |
|                |          | 0      |              |          |
|                |          | 200    | 22.50        | 40.25    |
|                |          | 80     |              |          |
|                |          | 300    | 28.25        | 11.37.25 |
|                |          | 400    |              |          |
|                |          | 500    |              |          |
|                |          | 600    |              |          |
|                |          | 700    |              |          |
|                |          | 800    |              |          |
|                |          | 900    |              |          |
|                |          | 1000   |              |          |
|                |          | 1100   |              |          |
|                |          | 1200   |              |          |
|                |          | 1300   |              |          |
|                |          | 1400   |              |          |
|                |          | 1500   |              |          |
|                |          | 1600   |              |          |
|                |          | 1700   |              |          |
|                |          | 1800   |              |          |
|                |          | 1900   |              |          |
|                |          | 2000   |              |          |
|                |          | 2100   |              |          |
|                |          | 2200   |              |          |
|                |          | 2300   |              |          |
|                |          | 2400   |              |          |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| , 50   |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

1 slender aspera, 1 young specimen  
long, narrow, 2 species? 1 small,  
16 darkish 2' at. 1 Pycnoclavell. 1 red with  
yellowish, 1 tall red with yellow, 1 yellow,  
few hermaphrodites, 1 apothecium,  
small quantity hydroids, sponge & hydroids

No. 2639 Hyg. Date Aug 3  
Samuel Machine. Reel.

Turns 30 Cor. + 1 Depth 31 fm.

Shot or lead 2

Bottom H. P. Sh.

Bottom temperature 60.0

No. of thermometer 7.35 Cor. —

Corrected temperature —

Air 4.9 Surface 45 Drift

Trawl or dredge

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |     |
|----------------|----------|--------|--------------|-----|
| DOWN.          | UP.      |        | DOWN.        | UP. |
| 11.41.10       | 11.43.00 | 30     |              |     |
|                |          | 100    |              |     |
|                |          | 200    |              |     |
|                |          | 300    |              |     |
|                |          | 400    |              |     |
|                |          | 500    |              |     |
|                |          | 600    |              |     |
|                |          | 700    |              |     |
|                |          | 800    |              |     |
|                |          | 900    |              |     |
|                |          | 1000   |              |     |
|                |          | 1100   |              |     |
|                |          | 1200   |              |     |
|                |          | 1300   |              |     |
|                |          | 1400   |              |     |
|                |          | 1500   |              |     |
|                |          | 1600   |              |     |
|                |          | 1700   |              |     |
|                |          | 1800   |              |     |
|                |          | 1900   |              |     |
|                |          | 2000   |              |     |
|                |          | 2100   |              |     |
|                |          | 2200   |              |     |
|                |          | 2300   |              |     |
|                |          | 2400   |              |     |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 3439 JY. Date Aug 3 1911.

Machine. Reel.

Turns 38 Cor. + 3 Depth 41 fms.

Shot or lead 26 lbs.

Bottom fine silt.

Bottom temperature 44° -

No. of thermometer 66735 Cor.

Corrected temperature

Air 50° Surface 44° Drift

Trawl or dredge S.B.

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |          |
|----------------|----------|--------|--------------|----------|
| DOWN.          | UP.      |        | DOWN.        | UP.      |
| 12.26.15       | 27.30    | 0      | 12.26.20     | 12.26.20 |
| 26.30          | 12.26.40 | 100    | 27.00        | 12.26.40 |
|                |          | 150    | 27.00        | 12.26.40 |
|                |          | 200    | 27.00        | 12.26.40 |
|                |          | 300    |              |          |
|                |          | 400    |              |          |
|                |          | 500    |              |          |
|                |          | 600    |              |          |
|                |          | 700    |              |          |
|                |          | 800    |              |          |
|                |          | 900    |              |          |
|                |          | 1000   |              |          |
|                |          | 1100   |              |          |
|                |          | 1200   |              |          |
|                |          | 1300   |              |          |
|                |          | 1400   |              |          |
|                |          | 1500   |              |          |
|                |          | 1600   |              |          |
|                |          | 1700   |              |          |
|                |          | 1800   |              |          |
|                |          | 1900   |              |          |
|                |          | 2000   |              |          |
|                |          | 2100   |              |          |
|                |          | 2200   |              |          |
|                |          | 2300   |              |          |
|                |          | 2400   |              |          |

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

Medusæ.

REMARKS:

Ophiurans. 3 sps. Star fish.

Shells and Nomi.

2 sps. Shrimps.

alligator fish.

Ascidian stalks. Part eaten

No. 3440 Dr. Date August 3<sup>rd</sup> 1891,  
anner Machine. — Reel.

Turns 46 Cor. + Depth 48 fm

Shot or lead 26 lbs.

Bottom 44 M. S.H.

Bottom temperature —

No. of thermometer 66 73.5 — Cor. lost.

Corrected temperature — 1 mi.

Air 44.9 Surface 46 Drift N.W. 4 M.

Trawl or dredge S. B. (Mag.) —

| SOUNDING WIRE.<br>DOWN. | UP. | TURNs. | DREDGE ROPE.<br>fm<br>DOWN. | UP.     |
|-------------------------|-----|--------|-----------------------------|---------|
|                         |     | 0      | 1.39.00                     | 12.30   |
|                         |     | 100    | 45.30                       | 09.30   |
|                         |     | 160    | 48.30                       | 2.06.00 |
|                         |     | 300    |                             |         |
|                         |     | 400    |                             |         |
|                         |     | 500    |                             |         |
|                         |     | 600    |                             |         |
|                         |     | 700    |                             |         |
|                         |     | 800    |                             |         |
|                         |     | 900    |                             |         |
|                         |     | 1000   |                             |         |
|                         |     | 1100   |                             |         |
|                         |     | 1200   |                             |         |
|                         |     | 1300   |                             |         |
|                         |     | 1400   |                             |         |
|                         |     | 1500   |                             |         |
|                         |     | 1600   |                             |         |
|                         |     | 1700   |                             |         |
|                         |     | 1800   |                             |         |
|                         |     | 1900   |                             |         |
|                         |     | 2000   |                             |         |
|                         |     | 2100   |                             |         |
|                         |     | 2200   |                             |         |
|                         |     | 2300   |                             |         |
|                         |     | 2400   |                             |         |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS

5 of. Blue fish, 18 wgs. 12 large crabs, new species, deg. tender  
14 fish, 10 species, qual. fine, 1000 ft.  
Giant frog. 3 small specimens,  
1 rock starlet red color.

No. 34111 Date Aug. 13, 1901.  
Tanner Machine. — Reel.

Turns Cor. + Depth

Shot or lead 26 lbs.

Bottom H. M. Sh.

Bottom temperature 39°

No. of thermometer 69476 Cor.

Corrected temperature 39°

Air 69° Surface 45° Drift 1 fm.

Trawl or dredge 1/1

| SOUNDING WIRE. |      | TURNS. | DREDGE ROPE. |      |
|----------------|------|--------|--------------|------|
| DOWN.          | UP.  |        | DOWN.        | UP.  |
| 30             | 17.0 | 0      |              | 45.3 |
| 110            | 11.1 | 100    | 17.0         | 11.0 |
|                |      | 150    | 21.0         |      |
|                |      | 200    |              |      |
|                |      | 300    |              |      |
|                |      | 400    |              |      |
|                |      | 500    |              |      |
|                |      | 600    |              |      |
|                |      | 700    |              |      |
|                |      | 800    |              |      |
|                |      | 900    |              |      |
|                |      | 1000   |              |      |
|                |      | 1100   |              |      |
|                |      | 1200   |              |      |
|                |      | 1300   |              |      |
|                |      | 1400   |              |      |
|                |      | 1500   |              |      |
|                |      | 1600   |              |      |
|                |      | 1700   |              |      |
|                |      | 1800   |              |      |
|                |      | 1900   |              |      |
|                |      | 2000   |              |      |
|                |      | 2100   |              |      |
|                |      | 2200   |              |      |
|                |      | 2300   |              |      |
|                |      | 2400   |              |      |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

few large schools  
of salmon etc.

J. D. Cook,

No.

Date Aug

Machine. Reel.

Turns 45 Cor. + 7 Depth 47.

Shot or lead 26 lb.

Bottom Bl. M. ph.

Bottom temperature

No. of thermometer 69 476 Cor.

Corrected temperature

Air 50 Surface 50 Drift  $\frac{1}{10}$  11

Trawl or dredge

| SOUNDING WIRE. |        | TURNS. | DREDGE ROPE. |     |
|----------------|--------|--------|--------------|-----|
| DOWN.          | UP.    |        | DOWN.        | UP. |
| 4-37-30        | 4-48-0 | 0      | 4-13-0       |     |
| 39-0           |        | 100    | 48-31        | 5   |
|                |        | 200    |              |     |
|                |        | 300    |              |     |
|                |        | 400    |              |     |
|                |        | 500    |              |     |
|                |        | 600    |              |     |
|                |        | 700    |              |     |
|                |        | 800    |              |     |
|                |        | 900    |              |     |
|                |        | 1000   |              |     |
|                |        | 1100   |              |     |
|                |        | 1200   |              |     |
|                |        | 1300   |              |     |
|                |        | 1400   |              |     |
|                |        | 1500   |              |     |
|                |        | 1600   |              |     |
|                |        | 1700   |              |     |
|                |        | 1800   |              |     |
|                |        | 1900   |              |     |
|                |        | 2000   |              |     |
|                |        | 2100   |              |     |
|                |        | 2200   |              |     |
|                |        | 2300   |              |     |
|                |        | 2400   |              |     |

Small green shells, & red murex.  
Anemones & lateral. Green sea

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| 2500 |
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| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
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| 3500 |
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| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

2 large fish, 2 small fish, 1000 ft.  
 3 basket oysters, 1000 ft.  
 3 large fish (sharks), 1000 ft.  
 8 pieces of sponge, 1000 ft.  
 3 sponges, basket 1000 ft.

100. ✓

No.

Date

Machine..... Recl.

Turns 700 Cor. + 2 Depth 47

Shot or lead 26 lbs.

Bottom 10 fms.

Bottom temperature

No. of thermometer 64.7 / 100 Cor.

Corrected temperature

Air 49 Surface 49 Drift

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

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| 2500 |
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| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 3000 Date 1907.

Danner Machine. — Reel.

Turns 23 Cor. + 1 Depth 24

Shot or lead 28 lbs.

Bottom

Bottom temperature 43°

No. of thermometer 16 Cor.

Corrected temperature

Air 53 Surface 48 Drift —

Trawl or dredge

| SOUNDING WIRE. |         |       | DREDGE ROPE. |     |
|----------------|---------|-------|--------------|-----|
| DOWN.          | UP.     | URNS. | DOWN.        | UP. |
| 6.17.20        | 6.19.00 | 0     |              |     |
|                |         | 100   |              |     |
|                |         | 200   |              |     |
|                |         | 300   |              |     |
|                |         | 400   |              |     |
|                |         | 500   |              |     |
|                |         | 600   |              |     |
|                |         | 700   |              |     |
|                |         | 800   |              |     |
|                |         | 900   |              |     |
|                |         | 1000  |              |     |
|                |         | 1100  |              |     |
|                |         | 1200  |              |     |
|                |         | 1300  |              |     |
|                |         | 1400  |              |     |
|                |         | 1500  |              |     |
|                |         | 1600  |              |     |
|                |         | 1700  |              |     |
|                |         | 1800  |              |     |
|                |         | 1900  |              |     |
|                |         | 2000  |              |     |
|                |         | 2100  |              |     |
|                |         | 2200  |              |     |
|                |         | 2300  |              |     |
|                |         | 2400  |              |     |

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| 2500 |
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| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
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| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 5743 Date Jan

Machine. Reel.

Turns 42 Cor. + 5 Depth 97 fms.

Shot or lead 26 lbs

Bottom 9m. M. Obs.

Bottom temperature 46

No. of thermometer 69476 Cor.

Corrected temperature

Air Surface 51 Drift

Trawl or dredge L. B

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |         |
|----------------|-----|--------|--------------|---------|
| DOWN.          | UP. |        | DOWN.        | UP.     |
|                |     | 0      | 2.09.00      | 47.00   |
|                |     | 100    | 13.00        | 43.45   |
|                |     | 200    | 17.15        |         |
|                |     | 250    | 19.00        | 2.37.00 |
|                |     | 300    |              |         |
|                |     | 400    |              |         |
|                |     | 500    |              |         |
|                |     | 600    |              |         |
|                |     | 700    |              |         |
|                |     | 800    |              |         |
|                |     | 900    |              |         |
|                |     | 1000   |              |         |
|                |     | 1100   |              |         |
|                |     | 1200   |              |         |
|                |     | 1300   |              |         |
|                |     | 1400   |              |         |
|                |     | 1500   |              |         |
|                |     | 1600   |              |         |
|                |     | 1700   |              |         |
|                |     | 1800   |              |         |
|                |     | 1900   |              |         |
|                |     | 2000   |              |         |
|                |     | 2100   |              |         |
|                |     | 2200   |              |         |
|                |     | 2300   |              |         |
|                |     | 2400   |              |         |

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| 2500 |
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| 2700 |
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| 3000 |
| 3100 |
| 3200 |
| 3300 |
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| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Fishes  
Littoral positions. Pinnaria coriacea  
Crown - few Rhizos. -  
2 sp. Branchiopods, 1 sp. of -  
1 sp. Urchins - few sp. Ostracoda  
1 sp. Starfish - few sp. Ctenophores

No.

Date Aug. 7<sup>th</sup> 1891.

Machine. Reel.

Turns 76 Cor. + 4 Depth 80 fms.

Shot or lead 26 lbs

Bottom gy. 11 1/2 m

Bottom temperature 4.5

No. of thermometer 69476 Cor.

Corrected temperature

Air 66 Surface Drift

Trawl or dredge 2 Drift 1 1/2

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |      |
|----------------|-------|--------|--------------|------|
| DOWN.          | UP.   |        | DOWN.        | UP.  |
|                | 51.00 | 0      | 3.54.00      | 4.2  |
|                | 215   | 100    | 30.15        | 23.0 |
|                |       | 200    |              |      |
|                |       | 300    |              |      |
|                |       | 400    |              |      |
|                |       | 500    |              |      |
|                |       | 600    |              |      |
|                |       | 700    |              |      |
|                |       | 800    |              |      |
|                |       | 900    |              |      |
|                |       | 1000   |              |      |
|                |       | 1100   |              |      |
|                |       | 1200   |              |      |
|                |       | 1300   |              |      |
|                |       | 1400   |              |      |
|                |       | 1500   |              |      |
|                |       | 1600   |              |      |
|                |       | 1700   |              |      |
|                |       | 1800   |              |      |
|                |       | 1900   |              |      |
|                |       | 2000   |              |      |
|                |       | 2100   |              |      |
|                |       | 2200   |              |      |
|                |       | 2300   |              |      |
|                |       | 2400   |              |      |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
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| 3000 |
| 3100 |
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| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No.

Date

## Machine. Reel.

Turns 95 Cor. + 5 Depth 100

Shot or lead 26

Bottom

Bottom temperature

No. of thermometer 64416 Cor.

Corrected temperature

Air 10.5 Surface 12.4 Drift

Trawl or dredge 318 2m 21 1/2 fms. neg.

| SOUNDING WIRE, |     | TURNS, | DREDGE ROPE. |        |
|----------------|-----|--------|--------------|--------|
| DOWN.          | UP. |        | DOWN.        | UP.    |
|                |     | 0      |              |        |
|                |     | 100    | 34-30        | 1      |
|                |     | 200    | 43-0         | 0      |
|                |     | 300    | 47-0         | 6-05-0 |
|                |     | 400    |              |        |
|                |     | 500    |              |        |
|                |     | 600    |              |        |
|                |     | 700    |              |        |
|                |     | 800    |              |        |
|                |     | 900    |              |        |
|                |     | 1000   |              |        |
|                |     | 1100   |              |        |
|                |     | 1200   |              |        |
|                |     | 1300   |              |        |
|                |     | 1400   |              |        |
|                |     | 1500   |              |        |
|                |     | 1600   |              |        |
|                |     | 1700   |              |        |
|                |     | 1800   |              |        |
|                |     | 1900   |              |        |
|                |     | 2000   |              |        |
|                |     | 2100   |              |        |
|                |     | 2200   |              |        |
|                |     | 2300   |              |        |
|                |     | 2400   |              |        |

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| 2500 |
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| 2700 |
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| 3200 |
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| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TRMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Fishes

Small fish  
Small shrimps, small crabs,  
A few fish, small fish (the most common),  
A fewurchins, several lobsters, a  
few brittle stars, soft corals, naked  
oysters, Many fish, 2 sharks,  
green turtles, etc.

No.

Date

Machine. Reel.

Turns 95 Cor. + 5 Depth 100

Shot or lead 26 lbs.

Bottom 50 m

Bottom temperature 44°

No. of thermometer 694.76 Cor.

Corrected temperature

Air 62° Surface Drift

Trawl or dredge 41°

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
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|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

Linn Seaman's Log - 2 Miles East

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| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

A few shrimp  
seen in the  
water column

Bottom  
16° in Middle

No. 2642 Hy. Date Aug. 1  
Tanner Machine — Reel.

Turns 74 Cor. + 4 Depth 78 yds

Shot or lead 26 lbs.

Bottom

Bottom temperature 55° F.

No. of thermometer 69.476 Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
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| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTHL. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---------|-------|--------------|------|------------|
| 25      |       |              |      |            |
| 50      |       |              |      |            |
| 100     |       |              |      |            |
| 200     |       |              |      |            |
| 300     |       |              |      |            |
| 400     |       |              |      |            |
| 500     |       |              |      |            |
| 600     |       |              |      |            |
| 700     |       |              |      |            |
| 800     |       |              |      |            |
| 900     |       |              |      |            |
| 1000    |       |              |      |            |

REMARKS:

No.

Date

Machine. Reel.

Turns 137 Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

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| 2500 |
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| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

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#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No.

Date

Machine. Reel.

Turns Cor. + Depth / 100 /

Shot or lead

Bottom

Bottom temperature

No. of thermometer 6 Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
| /              |     | 2300   |              |     |
|                |     | 2400   |              |     |

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| 2500 |
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| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. ~~111~~ Date ~~111~~  
 Diameter Machine. Reel.  
 Turns 113 Cor. + Depth 119  
 Shot or lead 56  
 Bottom 945  
 Bottom temperature 25.1  
 No. of thermometer 499424 Cor.  
 Corrected temperature  
 Air Surface Drift  
 Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

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| 2500 |
| 2600 |
| 2700 |
| 2800 |
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| 3100 |
| 3200 |
| 3300 |
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| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 2447 Date

Machine. Reel.

Turns //D. Cor. + Depth

Shot or lead

Bottom

Bottom temperature /

No. of thermometer Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge A.D.

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. | UP. |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        |              |     |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

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| 2500 |
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| 3200 |
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| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Fishes  
 Mississippian - 15° Fahrenheit  
 Lat. 75° N., Aug. 1866.  
 20 fms. deep,  
 15 fms. below bottom  
 100 fms. distance, 100 fms. depth  
 100 fms. distance, 100 fms. depth  
 100 fms. distance, 100 fms. depth

No. 41159 Date August 19  
Machine. Reel.

Turns 93 Cor. + 5 Depth 98 fms

Shob or lead 26 lbs

Bottom gy. S.

Bottom temperature 44°

No. of thermometer 69476 Cor.

Corrected temperature

Air Surface Drift 0.0 N.

Trawl or dredge C B

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |         |     |
|----------------|-------|--------|--------------|---------|-----|
| DOWN.          | UP.   |        | P. M.        | DOWN.   | UP. |
|                | 13.00 | 0      | 3.13.00      | 48.00   |     |
|                | 13.5  | 100    | 1" -         | -       |     |
|                |       | 200    | 20.30        | 40.30   |     |
|                |       | 300    | 23.45        | 3.31.15 |     |
|                |       | 400    |              |         |     |
|                |       | 500    |              |         |     |
|                |       | 600    |              |         |     |
|                |       | 700    |              |         |     |
|                |       | 800    |              |         |     |
|                |       | 900    |              |         |     |
|                |       | 1000   |              |         |     |
|                |       | 1100   |              |         |     |
|                |       | 1200   |              |         |     |
|                |       | 1300   |              |         |     |
|                |       | 1400   |              |         |     |
|                |       | 1500   |              |         |     |
|                |       | 1600   |              |         |     |
|                |       | 1700   |              |         |     |
|                |       | 1800   |              |         |     |
|                |       | 1900   |              |         |     |
|                |       | 2000   |              |         |     |
|                |       | 2100   |              |         |     |
|                |       | 2200   |              |         |     |
|                |       | 2300   |              |         |     |
|                |       | 2400   |              |         |     |

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| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Fishes:  
2 Rat fish   1 whale   1 Cryptocentrus  
1 Pygocentrus (blue fish)  
 few sterlings & juveniles

No 31149 Date Aug. 11, 1881

Tanner Machine. — Reel.

Turns 12 Cor. + Depth 13 fms.

Shot or lead 26 lbs.

Bottom gy. S. S.

Bottom temperature 69° 4' F.

No. of thermometer 69 476 Cor. —

Corrected temperature — 1 Knot

Air Surface Drift

Trawl or dredge L. B.

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |       |
|----------------|-------|--------|--------------|-------|
| DOWN.          | UP.   |        | DOWN.        | UP.   |
| 4.08.00        | 13.00 | 0      | 4.14.00      | 46.15 |
| 09.00          | 11.00 | 100    | 18.00        | 43.00 |
|                |       | 200    | 22.00        | 41.00 |
|                |       | 300    |              |       |
|                |       | 400    |              |       |
|                |       | 500    |              |       |
|                |       | 600    |              |       |
|                |       | 700    |              |       |
|                |       | 800    |              |       |
|                |       | 900    |              |       |
|                |       | 1000   |              |       |
|                |       | 1100   |              |       |
|                |       | 1200   |              |       |
|                |       | 1300   |              |       |
|                |       | 1400   |              |       |
|                |       | 1500   |              |       |
|                |       | 1600   |              |       |
|                |       | 1700   |              |       |
|                |       | 1800   |              |       |
|                |       | 1900   |              |       |
|                |       | 2000   |              |       |
|                |       | 2100   |              |       |
|                |       | 2200   |              |       |
|                |       | 2300   |              |       |
|                |       | 2400   |              |       |

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| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

Fishes  
 1. *Serranus* ~~guttatus~~  
 1. " *Lancis* ... ?  
 2. *Chimaera* ~~gigantea~~  
 2. " *Chimaera*.  
 2. *H. macrurus*.

No. 3456 Date Aug. 27<sup>th</sup> '91  
Tanner Machine - Reel.

Turns 145 Cor. + 6 Depth 151 fms.

Shot or lead 26 lbs.

Bottom 44°

Bottom temperature 44°

No. of thermometer 69.476 Cor.

Corrected temperature

Air 71.1 Surface 63 Drift 7/10 knot.  
8.00 7/2.8.

Trawl or dredge L. B.

| SOUNDING WIRE. |          | TURNS. | DREDGE ROPE. |         |
|----------------|----------|--------|--------------|---------|
| DOWN.          | UP.      |        | DOWN.        | UP.     |
| 17.25          |          | 0      | 5.16.00      | 17.25   |
| 13.15          | 15.30    | 100    | 22.00        | 52.30   |
|                | 17.16.00 | 200    | 24.00        | 29.30   |
|                |          | 300    | 27.00        | 46.30   |
|                |          | 350    |              |         |
|                |          | 400    | 30.00        | 5.44.30 |
|                |          | 500    |              |         |
|                |          | 600    |              |         |
|                |          | 700    |              |         |
|                |          | 800    |              |         |
|                |          | 900    |              |         |
|                |          | 1000   |              |         |
|                |          | 1100   |              |         |
|                |          | 1200   |              |         |
|                |          | 1300   |              |         |
|                |          | 1400   |              |         |
|                |          | 1500   |              |         |
|                |          | 1600   |              |         |
|                |          | 1700   |              |         |
|                |          | 1800   |              |         |
|                |          | 1900   |              |         |
|                |          | 2000   |              |         |
|                |          | 2100   |              |         |
|                |          | 2200   |              |         |
|                |          | 2300   |              |         |
|                |          | 2400   |              |         |

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| 3500 |
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| 3700 |
| 3800 |
| 3900 |
| 4000 |

SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

*Otonus pacificus*

No. 3411 Date 11/11/01  
Tanner Machine. Reel.

Turns 100 Cor. + Depth 100 fms

Shot or lead 26 lbs.

Bottom

Bottom temperature 45°

No. of thermometer 69476 Cor.

Corrected temperature

Air 5 Surface 6 Drift 6/10 kno

Trawl or dredge

| SOUNDING WIRE. |       | TURNS. | DREDGE ROPE. |         |
|----------------|-------|--------|--------------|---------|
| DOWN.          | UP.   |        | DOWN.        | UP.     |
| 50             | 28.30 | 0      | 6.71         | 7.02.60 |
|                |       | 100    |              |         |
|                |       | 200    |              |         |
|                |       | 300    |              |         |
|                |       | 400    |              |         |
|                |       | 500    |              |         |
|                |       | 600    |              |         |
|                |       | 700    |              |         |
|                |       | 800    |              |         |
|                |       | 900    |              |         |
|                |       | 1000   |              |         |
|                |       | 1100   |              |         |
|                |       | 1200   |              |         |
|                |       | 1300   |              |         |
|                |       | 1400   |              |         |
|                |       | 1500   |              |         |
|                |       | 1600   |              |         |
|                |       | 1700   |              |         |
|                |       | 1800   |              |         |
|                |       | 1900   |              |         |
|                |       | 2000   |              |         |
|                |       | 2100   |              |         |
|                |       | 2200   |              |         |
|                |       | 2300   |              |         |
|                |       | 2400   |              |         |

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|  | 3000 |  |
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|  | 3400 |  |
|  | 3500 |  |
|  | 3600 |  |
|  | 3700 |  |
|  | 3800 |  |
|  | 3900 |  |
|  | 4000 |  |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

#### REMARKS:

inches  
6 fathoms 3 in. The water  
was calm, dark, & opaque  
liquid.

507

No. 264 Date  
Janned Machine. Reel.

Turns 55 Cor. + Depth

Shot or lead 26 lbs

Bottom 9

Bottom temperature

No. of thermometer 6947 Cor.

Corrected temperature

Air 17 Surface Drift

Trawl or dredge

| SOUNDING WIRE. |     | TURNS. | DREDGE ROPE. |     |
|----------------|-----|--------|--------------|-----|
| DOWN.          | UP. |        | DOWN.        | UP. |
|                |     | 0      |              |     |
|                |     | 100    |              |     |
|                |     | 200    |              |     |
|                |     | 300    |              |     |
|                |     | 400    |              |     |
|                |     | 500    |              |     |
|                |     | 600    |              |     |
|                |     | 700    |              |     |
|                |     | 800    |              |     |
|                |     | 900    |              |     |
|                |     | 1000   |              |     |
|                |     | 1100   |              |     |
|                |     | 1200   |              |     |
|                |     | 1300   |              |     |
|                |     | 1400   |              |     |
|                |     | 1500   |              |     |
|                |     | 1600   |              |     |
|                |     | 1700   |              |     |
|                |     | 1800   |              |     |
|                |     | 1900   |              |     |
|                |     | 2000   |              |     |
|                |     | 2100   |              |     |
|                |     | 2200   |              |     |
|                |     | 2300   |              |     |
|                |     | 2400   |              |     |

|      |
|------|
| 2500 |
| 2600 |
| 2700 |
| 2800 |
| 2900 |
| 3000 |
| 3100 |
| 3200 |
| 3300 |
| 3400 |
| 3500 |
| 3600 |
| 3700 |
| 3800 |
| 3900 |
| 4000 |

#### SERIAL TEMPERATURES.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|--------|-------|--------------|------|------------|
| 25     |       |              |      |            |
| 50     |       |              |      |            |
| 100    |       |              |      |            |
| 200    |       |              |      |            |
| 300    |       |              |      |            |
| 400    |       |              |      |            |
| 500    |       |              |      |            |
| 600    |       |              |      |            |
| 700    |       |              |      |            |
| 800    |       |              |      |            |
| 900    |       |              |      |            |
| 1000   |       |              |      |            |

REMARKS:

No. 2646 Fly Date August 29/95  
 Tanner Machine. Reel.

Turns 133 Cor. + 7 Depth 140

Shot or lead 26 lbs

Bottom gravel

Bottom temperature 44°

No. of thermometer 69476 Cor.

Corrected temperature

Air 54° Surface 53° Drift

Trawl or dredge

| SOUNDING WIRE. |        | TURNS. | DREDGE ROPE. |     |
|----------------|--------|--------|--------------|-----|
| DOWN.          | UP.    |        | DOWN.        | UP. |
| 6-39-0         | 6-43-0 | 0      |              |     |
| 40-0           |        | 100    |              |     |
|                |        | 200    |              |     |
|                |        | 300    |              |     |
|                |        | 400    |              |     |
|                |        | 500    |              |     |
|                |        | 600    |              |     |
|                |        | 700    |              |     |
|                |        | 800    |              |     |
|                |        | 900    |              |     |
|                |        | 1000   |              |     |
|                |        | 1100   |              |     |
|                |        | 1200   |              |     |
|                |        | 1300   |              |     |
|                |        | 1400   |              |     |
|                |        | 1500   |              |     |
|                |        | 1600   |              |     |
|                |        | 1700   |              |     |
|                |        | 1800   |              |     |
|                |        | 1900   |              |     |
|                |        | 2000   |              |     |
|                |        | 2100   |              |     |
|                |        | 2200   |              |     |
|                |        | 2300   |              |     |
|                |        | 2400   |              |     |

met 'n on morning of 24 Jan

1 cod - 1 halibut

2 minnows -  
6 rocky bottom -

lives chopped off - and  
only about 1/5 of cod travel

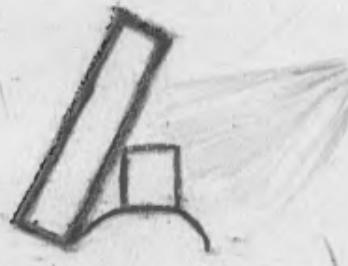
was recovered - 3 black cod -  
manx right - 28 lbs. 51 in long -

22 lbs.

Ars,

nothing recovered

202.8 } 60.2.0



$$\begin{array}{r} 28 \\ \times 73 \\ \hline 651 \\ + 21 \\ \hline 202.8 \end{array}$$

nothing recovered

$$\begin{array}{r} 615 \\ 112 \\ \hline 482 \end{array} \quad 7$$

$$\begin{array}{r} 615 \\ 112 \\ \hline 505 \end{array}$$

# Tanner Reel

17

615 turns. Correction 17  
 $\frac{6 \frac{1}{2}}{5 \frac{7}{3}}$

+

615 turns. Correction 17

| Turns | Correction |
|-------|------------|
| 50    | 0          |
| 100   | 0          |
| 150   | 1          |
| 200   | 2          |
| 250   | 3          |
| 300   | 4          |
| 350   | 5          |
| 400   | 4          |
| 450   | 9          |
| 500   | 11         |
| 550   | 13         |
| 600   | 16         |
| 615   | 17         |

Figure same as table for  
Degree Machine.